BULLETIN OF THE TASMANIAN FIELD NATURALISTS CLUB INC.

http://www.tased.edu.au/tasonline/tasfield/tasfield.htm

Feb 1998 **Number 289**
Editor Andrew Walsh

The Tasmanian Field Naturalists Club Inc. encourages the study of natural history and supports conservation. We issue our journal *The Tasmanian Naturalist* annually in October. People with a range of backgrounds and knowledge are welcome as members.

Contact Genevieve Gates (03 6227 8638) for further information, or write to GPO Box 68A Hobart 7001. Bulletin or website articles to Andrew Walsh (146 Misty Hill Rd. Mountain River 7109, 03 62664543).

PROGRAM

General meetings start at 7:45pm on the first Thursday of the month in the Life Sciences Building at the University of Tasmania. Outings are usually held the following weekend, meeting at 10am outside the Tasmanian Museum and Art Gallery entrance, Macquarie St. *If you are planning to attend an outing but not the meeting prior, check as to the timing of the excursion as sometimes unforeseen changes occur.*

5th Feb	Sue Baker. Macquarie Is. and Giant Petrels.
7th Feb (Sat)	Shearwaters at Cape Deslacs. With a guide from Parks and Wildlife, we'll venture down to Cape Deslacs at Clifton Beach (along Bicheno Rd) and from an observation platform watch the mutton birds return to their burrows in the dusk twilight . **Note the starting time.**
4th Mar	AGM & President's Address
6th-7th Mar	Orford Weekend. Details to be announced at the AGM 4th March.
2nd Apl	Karyl Micheals. Carabid beetles.
5th Apl (Sun)	Carabid beetles at Warra. A visit led by Rob Taylor to the long term ecological monitoring site at Warra, down near the Tahune Forest Reserve.

TASMANIAN FIELD NATURALISTS CLUB INC.-COMMITTEE NOMINATION FORM

I hereby propose____________________ **for the position of** ____________________

Proposer____________________ **Seconder** ____________________
Signature Signature

I agree to stand for the above position ________________ ________
Signature Date

Positions on the committee: President, Vice-president, Treasurer, Secretary, Bulletin Editor, Naturalist Editor, Programme Officer, Librarian, Submissions Officer, and two General Committee members.

the soil surface, and would consequently decline as a result of the removal of their substrate by fire. Other species, however, were abundant soon after fire, such as *Mesophellia* spp. And *Castoreum* spp. Because of these observations, Johnson suggests that fire should be used cautiously in the management of *B. Gaimardi.*

Johnson, C. N. Fire and habitat management for a mycophagous marsupial, the Tasmanian bettong Bettongonia gaimardi. *Aust Journ of Ecology, 1997, 22, 101-105.*

The following summaries come from reports produced for the R.F.A. for Tasmania. Copies of the reports can be viewed on the R.F.A website: **http://www.environment.gov.au/land/forests/cra/tas.html**

Invertebrate Bioregions

Locality records for selected groups of Tasmanian invertebrates were analysed in a search for invertebrate bioregions, faunal boundaries, 'hot spots' and data gaps. Twelve invertebrate bioregions were tentatively identified on mainland Tasmania. Most of these bioregions overlap fairly broadly with neighbouring bioregions. There are at least three well-documented, four poorly documented and five suspected faunal breaks (narrow transition zones between invertebrate bioregions). Several of the uncertain breaks run through largely cleared land and may no longer be demonstrable.

'Hot spots' (areas with unusually high species diversity or high numbers of rare or unusual species) could not be located at a spatial scale of use to conservation planners. The main obstacle is the recorder effect: invertebrate sampling in Tasmania has been highly biased (towards particular areas) at both coarse and fine spatial scales.

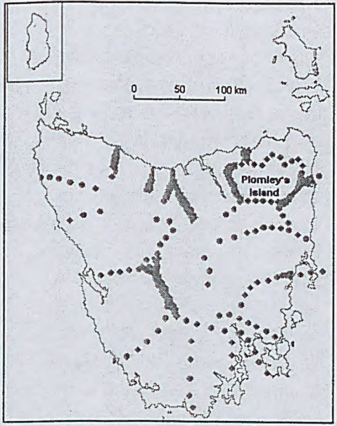

Figure 1. A provisional map of invertebrate bioregions (see Mesibov 1996 for further details).

Robert Mesibov December 1996 Invertebrate Bioregions in Tasmania. Report to Tasmanian RFA Environment and Heritage Technical Committee

The decaying-log habitat

In Australia, and Tasmania in particular, rotting logs have been identified as a critical habitat component for many invertebrates including threatened species. The quantity and characteristics of the decaying-log resource (fallen, dead wood) was sampled in two 5-7 year old cable logged coupes, two 15-24 year old conventionally clearfelled coupes, and adjacent unlogged control stands of mature wet *Eucalyptus obliqua* forest in south-eastern Tasmania.

The results of this study suggest that logging of mature wet eucalypt forest has a negligible impact on the decaying-log resource, at least in the short-term. Further research is required to determine the likely impact of second rotation logging of native forest and intensive forest management practices such as plantation forestry. These activities have the greatest potential to negatively effect the long-term quantity and quality of decaying wood in the forest, particularly through their impact on the continued supply of large-diameter logs at varying stages of decay, as has been shown overseas.

J. M. Meggs Nov 1996 Forestry Tasmania. Pilot study of the effects of modern logging practices on the decaying-log habitat in wet eucalypt forest in south-east Tasmania. Report to the Tasmanian RFA Environment and Heritage Technical Committee

Rare Tasmanian Forest Ferns

Michael Garret has identified eight species and one subspecies of ferns occurring in forested habitats in Tasmania and as being rare or threatened. Four of the taxa, *Asplenium hookerianum*, *Asplenium trichomanes* subsp. *trichomanes*, *Cheilanthes distans* and *Hypolepis distans*, have been discovered in Tasmania in only the last 20 years and are very rare. The remaining five species have been known from Tasmania since the nineteenth century, and have a history of decline in numbers of individuals and populations and in their geographic range within the State.

Land clearance for agriculture, and to a lesser degree for forestry, has been the major reason for the decline.

Future threats to the ferns are seen as mostly from continued clearance of land for agriculture, and from the consequential, and existing, adverse effects of competition from exotic weeds and trampling by stock.

Michael Garrett, 1997. Rare or threatened Tasmanian forest ferns. Report to the Tasmanian RFA Environment and Heritage Technical Committee the soil surface, and would consequently decline as a result of the removal of their substrate by fire. Other species, however, were abundant soon after fire, such as *Mesophellia* spp. And *Castoreum* spp. Because of these observations, Johnson suggests that fire should be used cautiously in the management of *B. Gaimardi.*

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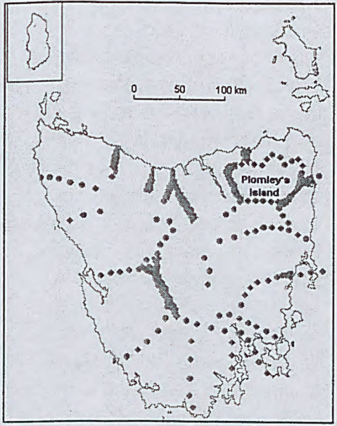

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Forest Owl habitats

Two owl species breed in Tasmania, the Masked Owl *Tyto novaehollandiae castanops* and the Southern Boobook *Ninox novaeseelandiae leucopsis*. A third species, the Barn Owl *Tyto alba* occurs as a vagrant but with no confirmed reports of breeding. Both the Masked Owl and Southern Boobook are forest dependent requiring cavities in eucalypt trees for nesting. Changes to the structure and/or floristics of forests as a result of logging have the potential to influence the distribution and abundance of these species, either directly through the removal or modification of essential habitat, or indirectly through effects on the abundance of their prey species. Recent research in southeastern mainland Australia has provided a considerable addition to our knowledge of the habitat requirements, geographic distributions and abundance of some species of forest owls. However, as ecological studies of owls in Australia are a recent phenomenon, much ground needs to be covered in order to fully appreciate the effects of forestry practices on owls and their prey. There is a dearth of information on the distribution, population status and habitat requirements of the Masked Owl and Southern Boobook in Tasmania. Consequently there is little on which to base assessments of conservation status, reservation status or the effects of forest modification on these species.

Phil Bell, Nick Mooney and Jason Wiersma, December 1996. Predicting Essential Habitat for Forest Owls in Tasmania. Australasian Raptor Association Report to the Tasmanian Environment and Heritage Technical Committee

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Outing Reports

8/11/97 Friends School Land at Spring Beach

by Genevieve Gates

The November outing to Spring Beach, Orford, was a very pleasant and informative day for the 18 members who attended. The major part of the day was spent at the Friend's School land, observing and identifying flora and fauna. We thank Mary Beadle, one of our members who is a biology teacher at Friend's School for arranging this excursion. After lunch at Spring Beach several members walked to the beach and rocks and found 5 crab species including the Green Crab *Carcinas maenas* which had been the subject of Craig Proctors talk at the previous meeting. Other crabs identified were, Smooth shore crab (*Cyclograpusus audouini*), purple mottled shore crab (*Cyclograpsus granulosis*), Half -crab (*Petrolisthes elongatus*), and notched shore crab (*Paragrapsus quadridentalus*).

7/12/97 Crabtree-Jefferies Track

by Genevieve Gates

Twenty members met for a walk starting at the Crabtree end of Jerfferies track.

The steady climb took us through wet sclerophyll gully forest with Swamp Gum (*Eucalyptus regnans)* and Whitetop stringy bark (*E. delegatensis*) domintating an understorey of *Pomaderis apetala, Oleraia argophylla, Phebalium squameum* and *Prostanthera lasianthas*.

Shrubs such as *Cyathodes glauca, Correa reflexa, Leptospermum lanigerum** (*=in flower), *Anopterus glandulosus**, *Aristoleia pedunculata**, *Oxylobium ellipticum** and *Gualtheria hispida** together with various ferns and orchids formed the remainder of the understorey. Orchid species in flower included *Caledenia alpina, Chiloglotis gunni, Chiloglotis cornuta,* and *Thelymitra pauciflora.*

At the end of the climb, where the track joins part of the Tasmanian Trail, the vegetation was very similar to that found at Snug Tiers. This included *Westringia sp.**, *Pentachondra involucrata, Banksia marginata, Acacia ricena, Pultenea juniperina*, Baura ruboides*, Hibertia sp.**, and *Telopea truncata**.

The main aim of the walk was to investigate a patch of forest to see if it contained a wedge-tailed eagle's nest. Whist we didn't spot any eagles or their nest, we did see a baby currawong being fed in it's nest. Other birds seen/heard included the thornbill, cranky fan, shining bronze cuckoo, and spotted pardalote.

Carabid, lady bird and leaf beetles were also observed, along with native slugs, a flat worm, and a swallow tailed butterfly. Kevin Bonham identified 10 snail species including an uncommon one *Dentherona dispar*. The other nine species were;

Caryodes dufresnii
Tasmaphena sinclairi
Cystopelta bicolor (native slug)
Paralaoma Caput spinulae
Trocholaoma parvissimia
Allocharopa legrandi
Mulathena fordei
Dentherona dispar
Roblinella gadensis
Pernagera architectonica

Watch This Space

Next bulletin we will be publishing a list of the names and contact details of all our members, for your information. If you would prefer not to have your address listed, then see me/call at one of the meetings or contact me and I will not include you.

☺*Andrew Walsh*